

Massage carriage

5

Claims

1. Massage carriage for use in a massage chair or similar
10 that can be moved back and forth along a frame in the
massage chair or similar, comprising a drive (1) that
contains at least one motor (2) and gearing parts, a first
shaft (6) that can be moved by the drive (1) and a second
shaft (7) that can be moved by the drive (1), two first
15 arms (18, 19), which are connected to the first shaft (6),
can be moved by the first shaft (6) and on each of which a
massage element (20, 21) is mounted, and two second arms
(24, 25), which are connected to the second shaft (7) and
can be moved by the second shaft (7), one of which each
20 acts on one of the first arms (18, 19), such that the
massage elements (20, 21) can be moved by the drive (1)
with one movement component oriented parallel to the frame
and one oriented perpendicular to the frame, where the
drive (1) displays a single motor (2) with a motor shaft
25 (3), characterized in that the motor
shaft (3) displays two shaft sections (8, 9), arranged on
opposite face ends of the motor (2) and lying on one axis,
where the first shaft (6) can be moved by means of the one
shaft section (8) via a reduction gear (4), and the second
30 shaft (7) by means of the other shaft section (9) via a
reduction gear (5).
2. Massage carriage according to Claim 1, characterized
35 in that the shaft sections (8, 9) are
sections of a continuous motor shaft (3).

3. Message carriage according to Claim 1 or 2, c h a r a c -
t e r i z e d i n t h a t the reduction gear (5) via
which the second shaft (7) can be moved displays a free-
5 wheel device (10) in a particular sense of rotation of the
motor shaft.
4. Message carriage according to Claim 1, c h a r a c -
t e r i z e d i n t h a t one of the shaft sections (9)
10 can be permanently driven by the motor (2), and the other
shaft section (8) can be disconnected from the motor (2)
by means of a clutch (11).
5. Message carriage according to Claim 4, c h a r a c -
15 t e r i z e d i n t h a t the clutch (11) is an
electromagnetic clutch.
6. Message carriage according to Claim 4 or 5, c h a r a c -
t e r i z e d i n t h a t the clutch (11) displays an
20 automatic brake, by means of which the disconnectable
shaft section (8) can be braked or blocked in disconnected
state.
7. Message carriage according to Claim 6, c h a r a c -
25 t e r i z e d i n t h a t the disconnectable shaft
section (8) can be braked or blocked by an integrated
spring mechanism.
8. Message carriage according to one of Claims 4 to 7,
30 c h a r a c t e r i z e d i n t h a t the reduction
gear (5) via which the second shaft (7) can be moved
displays a free-wheel device (10) in a particular sense of
rotation of the shaft section (9) that can be permanently
driven by the motor (2).

9. Massage carriage according to one of Claims 1 to 8, characterized in that the drive (1) displays a housing comprising two shells (26, 27) for the motor (2) and the gearing parts.

5

10. Massage carriage according to Claim 9, characterized in that the bearing arrangement for the motor (2) and the gearing parts is integrated in the housing in one piece.

10

11. Massage carriage according to Claim 10, characterized in that the housing shells (26, 27) and the bearing arrangement for the motor (2) and the gearing parts are made of plastic, injection-molded in one piece.

15

12. Massage carriage according to one of Claims 9 to 11, characterized in that one part (31) of a nut is integrally molded on the housing and interacts with the spindle (30) of a linear drive unit located on the frame for moving the massage carriage along the frame, where the other part (32) of the nut (29) can be fastened to the one part (31) from the outside, such that the spindle (30) can be accommodated between the two parts (31, 32).

20

25

13. Massage carriage according to one of Claims 1 to 12, characterized in that the two reduction gears are designed as worm gears.

30